

## Title (en)

LITHIUM SECONDARY BATTERY NEGATIVE ELECTRODE ACTIVE MATERIAL AND METHOD FOR MANUFACTURING SAME

## Title (de)

AKTIVMATERIAL FÜR NEGATIVELEKTRODE EINER LITHIUMSEKUNDÄRBATTERIE UND VERFAHREN ZUR HERSTELLUNG DAVON

## Title (fr)

MATÉRIAU ACTIF D'ÉLECTRODE NÉGATIVE DE BATTERIE RECHARGEABLE AU LITHIUM ET SON PROCÉDÉ DE FABRICATION

## Publication

**EP 2985821 A4 20160907 (EN)**

## Application

**EP 14782233 A 20140226**

## Priority

- JP 2013082505 A 20130410
- JP 2014054760 W 20140226

## Abstract (en)

[origin: EP2985821A1] [Problem] To provide a lithium secondary battery negative electrode active material consisting of a Sn-Sb based sulfide that delivers a high electrode capacity density, excellent output characteristics, and excellent cycle life characteristics and also provide a method for manufacturing the lithium secondary battery negative electrode active material, said method being capable of easily manufacturing the high performance lithium secondary battery negative electrode active material at low cost without requiring a high-temperature processing step and special facilities as required in a glass melting method. [Solution] A method for manufacturing a lithium secondary battery negative electrode active material containing a Sn-Sb based sulfide comprises a step of obtaining a Sn-Sb based sulfide precipitate by adding an alkali metal sulfide to a mixed solution of a tin halide and an antimony halide.

## IPC 8 full level

**C01B 17/20** (2006.01); **C01G 30/00** (2006.01); **H01M 4/02** (2006.01); **H01M 4/36** (2006.01); **H01M 4/38** (2006.01); **H01M 4/485** (2010.01); **H01M 4/58** (2006.01); **H01M 10/052** (2010.01)

## CPC (source: EP US)

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## Citation (search report)

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- [Y] US 2012045687 A1 20120223 - WANG QIANG [CN], et al
- [A] EP 2541656 A1 20130102 - NAT INST OF ADVANCED IND SCIEN [JP], et al
- [X] RIKI KATAOKA ET AL: "Development of high capacity positive electrode material for sodium ion battery", PACIFIC RIM MEETING ON ELECTROCHEMICAL AND SOLID-STATE SCIENCE 2012; PRIME 2012 - HONOLULU, HAWAII OCTOBER 7 - OCTOBER 12, 2012, 7 October 2012 (2012-10-07), XP055153907
- See references of WO 2014167906A1

## Designated contracting state (EPC)

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## DOCDB simple family (publication)

**EP 2985821 A1 20160217; EP 2985821 A4 20160907**; HK 1221330 A1 20170526; JP 2014207064 A 20141030; JP 6114971 B2 20170419; US 10141573 B2 20181127; US 2016072127 A1 20160310; WO 2014167906 A1 20141016

## DOCDB simple family (application)

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